

# Notice of Allowability

Application No.

09/577,593

Examiner

Ayal I Sharon

Applicant(s)

FUJINO, HIDEKI

Art Unit

2123

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment dated 7/16/2004.
2. ☒ The allowed claim(s) is/are 1-3,6-14 and 17-22, now numbered as 1-18.
3. ☒ The drawings filed on 25 May 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

JEAN R. HOMERE  
PRIMARY EXAMINER

### EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

1. The Final Rejection of U.S. Application 09/577,593 (dated 1/20/2004) indicated in paragraphs 2 and 3 that the dependent claims 5-6 and 16-17 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and all intervening claims. The reasons for allowability were originally presented in paragraph 3 of the Final Rejection, and are repeated in the paragraph immediately below.
2. U.S. Patent 5,984,185 by Dickson et al. ("**Dickson**") teaches (col.60, line 65- col.62, line 10) the calculation of the incidence angle in a design process model. The variables in Expression No.3 in Fig.18C (See Dickson, col.61, lines 10-12) constitute "control parameters".

Dickson also teaches that during the assembly of the of the components designed in the model (see Dickson, col.70, lines 29-62), that "... the laser beam emanating from the second surface of the prism is automatically oriented along an axis which ultimately passes through the scanner disc in the plane formed between the (i) line extending from the outer scanning disc to Beam-Incident-Point point  $r_o$  and (ii) the scanning disc axis of rotation itself."

However, Dickson teaches (see Dickson, 01.70, lines 29-62) that "... the pivot plate is ... mounted within the recess of the optical bench of the laser beam production module and then the pivot plate is rotated relative to module bench

until the beam is perpendicular to the mirror, as indicated at Block N of Fig.21C2." In other words, Dickson teaches that the mirror is stationary and the laser beam production module rotates.

On the other hand, in Applicant's Claims 5 and 16, it is the mirror that rotates ("... a movable reflecting mirror that is capable of swinging around a predetermined rotational axis"), and the light source is stationary.

3. Therefore, Examiner found that dependent Claims 5 and 16 as being allowable over the cited prior art due to the distinct features of the rotating mirror and the stationary light source, in combination with the other limitations of the claims.
4. The Applicant's After Final Amendment (dated 5/19/2004) amended independent claim 1 to include the limitations of claim 5, and the limitations of intervening claim 4. In addition, independent claim 12 was amended to include the limitations of claim 16, and the limitations of intervening claim 15. Claims 4-5 and 15-16 were cancelled.
5. However, the unamended versions of independent claims 1 and 12 were resubmitted as new claims 24 and 25. In addition, new arguments were presented for claim 23. The Examiner therefore indicated in the Advisory Action (dated 6/25/2004) that the After Final Amendment would not be entered because the resubmission of the independent claims meant that the amendment did not simplify the issues for appeal, and the new arguments for claim 23 would have required further consideration and/or search.

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6. In the most recent After Final Amendment (dated 7/16/2004), the independent claims 1 and 12 were amended as in the previous After Final Amendment, and Claims 4-5 and 15-16 were cancelled. In addition, claim 23 was cancelled. No new claims have been amended.
7. The remaining claims 2-3, 6-11, 13-14, and 17-22, all depend from allowable claims 1 and 12.
8. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ayal I. Sharon whose telephone number is (703) 306-0297. The examiner can normally be reached on Monday through Thursday, and the first Friday of a biweek, 8:30 am – 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska can be reached on (703) 305-9704. Any response to this office action should be mailed to:

Director of Patents and Trademarks  
Washington, DC 20231

Hand-delivered responses should be brought to the following office:

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4<sup>th</sup> floor receptionist's office  
Crystal Park 2  
2121 Crystal Drive  
Arlington, VA 22202


The fax phone number is: (703) 872-9306

Any inquiry of a general nature or relating to the status of this application  
or proceeding should be directed to the receptionist, whose telephone number is:  
(703) 305-3900.

Ayal I. Sharon

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August 27, 2004

  
JEANNE F. HOMERE  
PRIMARY EXAMINER